

PTO/SB/21 (02-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Application Number	10/729,971
Filing Date	12/9/2003
First Named Inventor	LIU, Yan-Fei
Art Unit	Not yet assigned
Examiner Name	Not yet assigned
Attorney Docket Number	14545

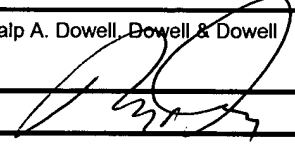
Total Number of Pages in This Submission

110

ENCLOSURES (Check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> After Allowance communication to Technology Center (TC) |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment/Reply | <input type="checkbox"/> Petition | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Terminal Disclaimer | <input type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Request for Refund | |
| <input checked="" type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> CD, Number of CD(s) _____ | |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | Remarks | |
| <input type="checkbox"/> Response to Missing Parts/Incomplete Application | | |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | | |

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Ralp A. Dowell, Dowell & Dowell
Signature	
Date	3/30/04

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name

Signature

Date

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : LIU et al.
Appl. No. : 10/729,971
Filed : December 9, 2003
Title : NON-ISOLATED DC-DC CONVERTERS WITH DIRECT
PRIMARY TO LOAD CURRENT

Grp./A.U. : 2838
Examiner :

Docket No. : 14545

Honorable Assistant Commissioner of Patents
Alexandria, VA 22313-1450

Sir:

PTO CUSTOMER NO. 000293

INFORMATION DISCLOSURE STATEMENT

In accordance with 37 C.F.R., §§ 1.97-1.99, applicant submits the following information which may be of interest to the examiner in charge of the above referenced application for patent. Copies of the references listed on the attached Form PTO/SB/08A, List of Prior Art Cited by Applicant, are attached.

Respectfully submitted,

Ralph A. Dowell
Registration No. 26,868

DOWELL & DOWELL, P.C.
Suite 309
1215 Jefferson Davis Highway
Arlington, Virginia 22202
Telephone (703) 415-2555



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 2

Complete if Known

Application Number	10/729,971
Filing Date	9 December 2003
First Named Inventor	LIU, Yan-Fei
Art Unit	
Examiner Name	
Attorney Docket Number	14545

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 2002/0118000 A1	08-29-2002	Xu et al	
		US- 6,163,466	12-19-2000	Davila, Jr et al	
		US- 6,469,915 B2	10-22-2002	Huang et al	
		US- 6,392,902 B1	05-21-2002	Jang et al	
		US- 6,388,898 B1	05-14-2002	Fan et al	
		US- 5,875,103	02-23-1999	Bhagwat et al	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

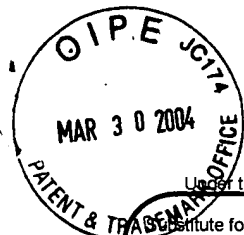
Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND

TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/729,971
		Filing Date	9 December 2003
		First Named Inventor	LIU, Yan-Fei
		Art Unit	
Examiner Name			
Sheet 2	of 2	Attorney Docket Number	14545

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		PENG XU, FRED C LEE, JIA WEI; The Coupled-Buck Converter for 12V VRM ...; VTIP Disclosure No.: 01-002; Virginia Tech Intellectual Properties, Inc.; Blacksburg, Virginia	
		ALBERT M. WU, SETH R. SANDERS; An Active Clamp Circuit for Voltage Regulation Module ...; IEEE Transactions On Power Electronics, Vol. 16 No. 5 September 2001 pp. 623-634	
		YURI PANOV, MILAN M. JOVANOVIC; Design Considerations for 12-V/1.5V, 50A Voltage Regulator ...; IEEE Transactions On Power Electronics, Vol. 16 No. 6 November 2001 pp. 776-783	
		INTEL; VRM 9.1 DC-DC Converter Design Guidelines; Intel Corporation; Order Number 298646-001; January 2002	
		INTEL; VRM 9.0 DC-DC Converter Design Guidelines; Intel Corporation; Order Number 249205-004; April 2002	
		R.L. STEIGERWALD, "High frequency resonant transistor DC-DC converters", IEEE Transactions on Industrial Electronics, Vol. 31, pp. 181-191, May 1984	
		F.S. TSAI, P. MATERU, and F.C. LEE, "Constant-frequency, clamped-mode resonant converters", IEEE Transactions on Power Electronics, Vol. 3, No. 4, pp. 460-473, Oct. 1988	
		Y.F. Liu, P.C. Sen, "Source reactance lossless switch ..", IEEE Transactions on Circuits and Systems - I, Fundamental Theory and Applications, Vol. 43, No.4, pp. 301-312, 4/96	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.